PNC Firstside Center

Pittsburgh, Pennsylvania



Owner: **PNC Financial Services Group**

Project Team: LDA - L.D. Astorino Companies Architect:

> LDA - L.D. Astorino Companies Engineer:

Dick Corporation Contractor:

Paladino Green Building Consultant:

Strategies

Building Statistics:

Completion Date: November 2000 Cost: \$140 million

Size: 656,671 gross square feet

Footprint: 140,418 square feet

Construction Type: 5 floor, new construction

Use Group: Financial services

Lot Size: 4.66 acres Annual Energy Use: 59 kBtu/sf/year Occupancy: 2.450 staff



Version 2.0 SILVER

Sustainable Sites

- Site Selection: Remediated brownfield site (previous urban railyard); contributes to an area needing economic revitalization
- Alternative Transportation: Ample bus lines; shower facilities for bicycle commuters; electric vehicle recharging station; site acts as downtown link for an extensive bike trail
- Reduced Site Disturbance: Exceeded local open space requirements by more than 25% by tightening program needs and stacking floor plans
- Stormwater Management: Filtering settlement basins capture and remove 80% of suspended solids and 40% of phosphorous
- Reduced Heat Islands: Used light colored/high-albedo materials for at least 36% of the site's non-roof impervious surfaces

Water Efficiency

Water Efficient Landscaping: Sub-surface irrigation system reduces water use for irrigation by more than 50%

Energy and Atmosphere

- Optimize Energy Performance: Exceeds ASHRAE 90.1-1999 by 33% using exterior passive sun shading, interior motorized window coverings, underfloor ventilation systems, and air handling units with full economizer capabilities
- Additional Commissioning: Best practice commissioning applied

Materials and Resources

- Recycled Content: 90% post-consumer recycled steel
- Local/Regional Materials: 54% of materials (by cost) were manufactured within 500 miles; 11% of materials were extracted, recovered or harvested locally

Indoor Environmental Quality

- CO₂ Monitoring: CO₂ sensors located in the return air duct
- Increase Ventilation Effectiveness: Complies with ASHRAE Fundamentals Chapter 31 through use of diffusers in both the underfloor and overhead air distribution systems and full capacity economizers
- Construction IAQ Management Plan: Cleaned the underfloor plenum and conducted a two-week building flush out after construction and before occupancy
- Low-Emitting Materials: Carpeting has low VOC emissions
- **Thermal Comfort:** Meets ASHRAE 55-1992 through integrated temperature controls. independent humidifying systems and economizers
- Daylight & Views: 93% of occupied space has access to exterior views; 79% of occupied space is daylit; strategies included a large southern exposure, skylights, atrium, glazed partitions and doors, and clerestory windows

Innovation & Design Process

Innovation in Design: Carpet tile with releasable adhesives and hybrid HVAC system reduce churn costs and waste